



Inventor(s): Akira Nokano, et al.

Title: PLASMA TREATMENT EQUIPMENT AND IMPEDANCE MEASUREMENT TOOL

### POWER OF ATTORNEY

The specification of the above-identified patent application was filed on February 25, 2004 as application Serial No. 10/786,914

I hereby revoke all previously granted powers of attorney in the above-identified patent application and appoint the following attorneys to prosecute said patent application and to transact all business in the Patent and Trademark Office connected therewith:

Gustavo Siller, Jr., Reg. No. 32,305  
Anthony P. Curtis, Ph.D., Reg. No. 46,193

Please address all correspondence and telephone calls to Anthony P. Curtis, Ph.D. in care of:

Brinks Hofer Gilson & Lione  
P.O. Box 10395  
Chicago, IL 60610  
(312)321-4200

The undersigned hereby authorizes the U.S. attorneys named herein to accept and follow instructions from Alps Electric Co., Ltd. as to any action to be taken in the Patent and Trademark Office regarding this application without direct communication between the U.S. attorney and the undersigned. In the event of a change in the persons from whom instructions may be taken, the U.S. attorneys named herein will be so notified by the undersigned.

Alps Electric Co., Ltd., a corporation, and Tadahiro Ohmi, an individual, certify that they are the assignees of the entire right, title and interest in the patent application identified above by virtue of a chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:

1. From Akira Nokano, Kojichi Fukuda, Sung Chul Kim, Yasuhiko Kasama, Tadahiro Ohmi, and Shoichi Ono  
To: Alps Electric Co., Ltd and Tadahiro Ohmi.  
The document was recorded in the Patent and Trademark Office at Reel 10399, frame 481 and corrected in the Patent and Trademark Office at Reel 14635, frame 321.

The undersigned has reviewed the assignment or all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signature: Masataka Kataoka Date: August 6, 2004  
Name: Masataka Kataoka  
Title: President - Alps Electric Co., Ltd.

Signature: Tadahiro Ohmi Date: August 6, 2004  
Name: Tadahiro Ohmi



I hereby certify that this correspondence is being deposited with the United States Postal Service, with sufficient postage, as first class mail in an envelope addressed to:

Mail Stop Reissue,  
Commissioner for Patents  
P.O. Box 1450, Alexandria, VA 22313-1450

*9/1/04*  
Date of Deposit

Anthony P. Curtis, Ph.D., Reg. No. 46,193

Name of applicant, assignee or  
Registered Representative

*9/1/04*  
Signature

Date of Signature

**REISSUE PATENT**  
**Case No. 9281/4793**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application for Reissue	)
of U.S. Patent No. 6,349,670	)
	)
Issued: February 26, 2002	)
	)
Patentee: Akira Nakano et al.	)
	)
U.S. Reissue Patent Application	)
Serial No.: 10/786,914	)
	)
Filed: February 25, 2004	)
	)
For: Plasma Treatment Equipment and	)
Impedance Measurement Tool	)

**CONSENT OF ASSIGNEES UNDER 37 CFR §§1.172 AND 3.73**

Commissioner for Patents  
Washington, D.C. 20231  
Mail Stop REISSUE

Dear Sir:

Alps Electric Co., Ltd. and Tadahiro Ohmi certify that they are the present assignees by assignment of U.S. Patent No. 6,349,670 entitled Plasma Treatment Equipment and Impedance Measurement Tool and granted on February 26, 2002 as certified in the accompanying CERTIFICATE UNDER 37 CFR 3.73(b).

I, Masataka Kataoka, am President of Alps Electric Co., Ltd. As Director, I have the power to sign papers on behalf of Alps Electric Co., Ltd. As Director of Alps Electric Co., Ltd., I hereby assent to the filing of the above-identified reissue application and the accompanying Reissue Declaration by the inventors, Akira Nokano, Koichi Fukuda, Sung Chul Kim, Yasuhiko Kasama, Tadahiro Ohmi, and Shoichi Ono.

I, Tadahiro Ohmi, hereby assent to the filing of the above-identified reissue application and the accompanying Reissue Declaration by the inventors, Kenichi Mitsumori, Yasuhiko Kasama, Akira Abe, Oh Eui Yeol, Tadahiro Ohmi, Takayuki Imaoka, and Masayuki Toda.

Respectfully submitted,

Dated: August 6, 2004

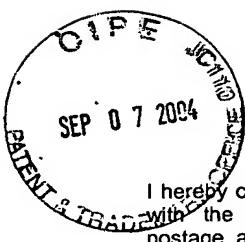


Masataka Kataoka  
President - Alps Electric Co., Ltd.

Dated: August 6, 2004



Tadahiro Ohmi



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Commissioner for Patents  
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*9/10/04*  
Date of Deposit

Anthony P. Curtis, Ph.D., Reg. No. 46,193

Name of applicant, assignee or  
Registered Representative

*APC*  
Signature

*9/10/04*  
Date of Signature

Case No. 9281/4793

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application for Reissue	)
of U.S. Patent No. 6,349,670	)
	)
Issued: February 26, 2002	)
	)
Patentee: Akira Nakano et al.	)
	)
U.S. Reissue Patent Application	)
Serial No.: 10/786,914	)
	)
Filed: February 25, 2004	)
	)
For: Plasma Treatment Equipment	)
And Impedance Measurement Tool	)

## DECLARATION OF THE INVENTORS, AKIRA NAKANO, SUNG CHUL KIM, KOICHI FUKUDA, YASUHIKO KASAMA, TADAHIRO OHMI, AND SHOICHI ONO, ON APPLICATION FOR REISSUE

Commissioner for Patents  
Washington, D.C. 20231  
Mail Stop REISSUE

Dear Sir:

We, Akira Nakano, Sung Chul Kim, Koichi Fukuda, Yasuhiko Kasama, Tadahiro Ohmi, and Shoichi Ono, upon information and belief hereby declare that:

1. We are the same declarants that signed the Declaration and Power of Attorney for Patent Application ("the original Declaration") of Akira Nakano, Sung Chul

Kim, Koichi Fukuda, Yasuhiko Kasama, Tadahiro Ohmi, and Shoichi Ono submitted in U.S. Patent Application Serial No. 09/442,539 ("the '539 application"), filed November 18, 1999, that issued as U.S. Patent No. 6,349,670 ("the '670 patent") for Plasma Treatment Equipment, on February 26, 2002. We herein affirm, redeclare, and incorporate all of the declarations made in the original Declaration filed in the '539 application.

2. The entire right, title, and interest in the '670 patent is vested in Alps Electric Co., Ltd and Tadahiro Ohmi. On November 8, 1999, the entire rights in the '348 application were assigned from us, Akira Nakano, Sung Chul Kim, Koichi Fukuda, Yasuhiko Kasama, Tadahiro Ohmi, and Shoichi Ono to Alps Electric. Co., Ltd., and Tadahiro Ohmi in an assignment. The assignment was incorrectly recorded in the U.S. Patent Office on November 18, 1999, and is located at Reel 10399, Frame 481. On May 19, 2004, the assignment was corrected in a Correction of Assignment recorded in the United States Patent and Trademark Office at Reel 14635, Frame 321.

3. Our names, residence, mailing address, and country of citizenship are:

Inventor Name:	Akira Nakano	Koichi Fukuda
Citizenship:	Japan	Japan
Residence:	Miyagi-ken, Japan	Miyagi-ken, Japan
Mailing Address:	c/o Alps Electric. Co., Ltd., 1-7 Yukigaya, Otsuka-cho, Ota-ku, Tokyo, Japan	c/o Alps Electric. Co., Ltd., 1-7 Yukigaya, Otsuka-cho, Ota-ku, Tokyo, Japan
Inventor Name:	Sung Chul Kim	Yasuhiko Kasama
Citizenship:	Korea	Japan
Residence:	Kyongki-Do, Korea	Miyagi-ken, Japan
Mailing Address:	c/o Alps Electric. Co., Ltd., 1-7 Yukigaya, Otsuka-cho, Ota-ku, Tokyo, Japan	c/o Alps Electric. Co., Ltd., 1-7 Yukigaya, Otsuka-cho, Ota-ku, Tokyo, Japan
Inventor Name:	Tadahiro Ohmi	Shoichi Ono

Citizenship:	Japan	Japan
Residence:	Miyagi-ken, Japan	Miyagi-ken, Japan
Mailing Address:	2-1-17 Komegafukuro, Aoba-ku, Sendai-shi, Miyagi-ken, Japan,	2-4-55 Kashiwagi, Aoba-ku, Sendai-shi, Miyagi-ken, Japan

4. We, Akira Nakano, Sung Chul Kim, Koichi Fukuda, Yasuhiko Kasama, Tadahiro Ohmi, and Shoichi Ono, believe that we are the sole joint inventors and the original and first inventors of the subject matter which is described and claimed in the '670 patent granted February 26, 2002, and for which a reissue of the '670 patent is sought on the invention entitled Plasma Treatment Equipment And Impedance Measurement Tool, the specification of which was filed on February 25, 2004 as reissue application serial No. 10/786,914.

5. We have reviewed and understand the contents of the above-identified reissue application specification, including the drawings and the claims, as amended in the Preliminary Amendment filed with the request for reissue ("the Preliminary Amendment") and as originally filed in the reissue application serial No. 10/786,914 on February 25, 2004.

6. We acknowledge the duty to disclose all information, which is material to patentability as defined in 37 CFR 1.56(a).

7. We believe that the original '670 patent is wholly or partly inoperative by reason of our claiming less than we had the right to claim in the patent. One error that is being corrected in the Preliminary Amendment is that we consider one aspect of the disclosed invention to cover plasma treatment equipment that comprises a chamber wall and a susceptor electrode having at least one of an electrode and an electrode shield, at least one of the electrode and the electrode shield being at the same DC potential as the chamber wall, wherein at least one of the at least one of the electrode and the electrode shield being at the same DC potential as the chamber wall is AC

shorted to the chamber wall. Claim 1 of the original '670 patent, however, only recites a plasma treatment equipment in which a chamber wall and a susceptor electrode having the same DC potential are AC shorted to each other. At least this error is being corrected by adding new claims in the Preliminary Amendment.

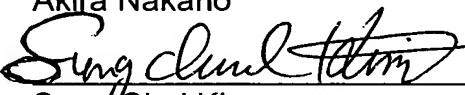
8. All errors corrected in this reissue application arose without any deceptive intention on the part of the applicants.

9. We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Title 18, §1001 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this declaration is directed.

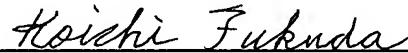
Dated: August 6, 2004

  
Akira Nakano

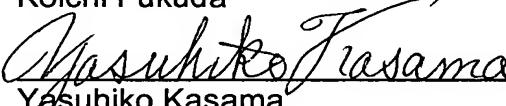
Dated: August 6, 2004

  
Sung Chul Kim

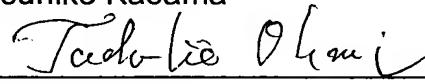
Dated: August 6, 2004

  
Koichi Fukuda

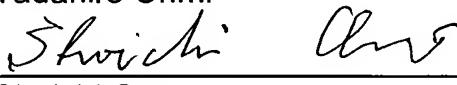
Dated: August 6, 2004

  
Yasuhiko Kasama

Dated: August 6, 2004

  
Tadahiro Ohmi

Dated: August 6, 2004

  
Shoichi Ono